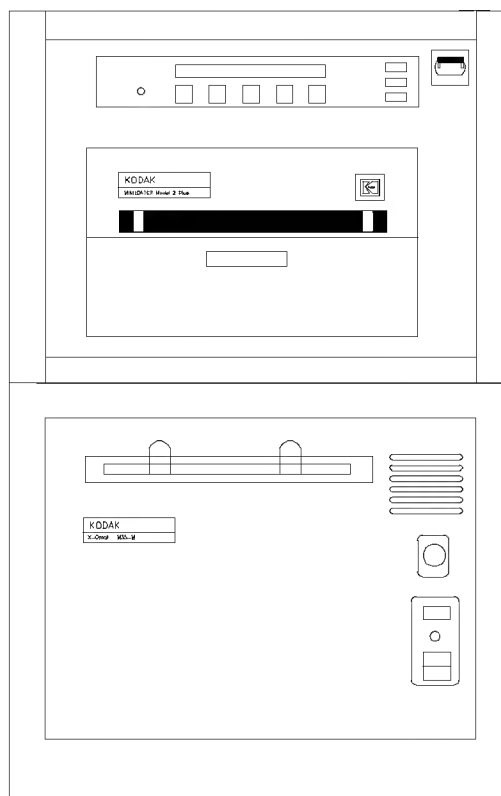


COMPONENT LOCATOR

for the

Kodak MINILOADER 2 PLUS

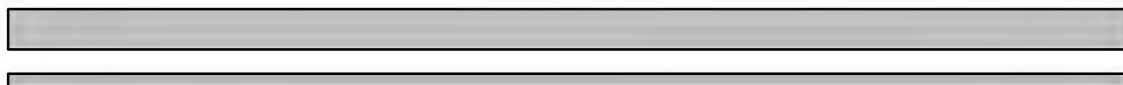


Use this Publication for:-

MINILOADER 2 Plus Model Stand-alone (SV code 3236), MINILOADER 2 Plus Model M35-M (SV code 3239) and MINILOADER 2 Plus Model 480RA (SV code 3240).



HEALTH SCIENCES DIVISION



CAUTION

This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

PLEASE NOTE

The information contained herein is based on the experience and knowledge relating to the subject matter gained by Kodak Ltd. prior to publication.

No patent licence is granted by this information.

Kodak reserves the right to change this information without notice, and makes no warranty, express or implied, with respect to this information. Kodak shall not be liable for any loss or damage, including consequential or special damages, resulting from the use of this information, even if loss or damage is caused by Kodak's negligence or other fault.

CONTENTS

	PAGE
PRINTED CIRCUIT BOARDS	4
FUSES	4
RELAYS	5
MICROSWITCHES	5
PHOTOCELLS	6
MOTORS	6
SOLENOID VALVES	7
TEST POINTS	7
MISCELLANEOUS COMPONENTS	7
FIGURE 1 (FRONT VIEW)	8
FIGURE 2 (RIGHT SIDE)	8
FIGURE 3 (REAR VIEW)	9
FIGURE 4 (LEFT SIDE)	9
FIGURE 5 (INSIDE FRONT COVER)	10
FIGURE 6	10
FIGURE 7 (PCB 301)	11
FIGURE 8 (PCB 205)	12
FIGURE 9 (PCB 206)	12
PUBLICATION CHANGE NOTICE TABLE	13

PRINTED CIRCUIT BOARDS

PCB 301	MICROPROCESSOR PCB and RELAYS	FIG 1
PCB 402	DISPLAY PCB	FIG 1
PCB 303	ESR KEYPAD, PHOTOCELL AMPLIFIERS and PRINTER INTERFACE	FIG 6
PCB 204	LED PCB (green, yellow and red)	FIG 1
PCB 205	MAGAZINE OPEN PHOTOCELLS and MAGAZINE CARRIAGE INHIBIT RELAY	FIG 6
PCB 206	TRANSFORMER SECONDARY FUSES	FIG 3

FUSES

F1	COMPRESSOR MOTOR	T 2 AMP (PCB 301)	FIG 7
F2	VACUUM PUMP, CASSETTE	T 2 AMP (PCB 301)	FIG 7
F3	VACUUM PUMP, MAGAZINE	T 2 AMP (PCB 301)	FIG 7
F4	FAN MOTOR	T 2 AMP (PCB 301)	FIG 7
F5	TILT MOTOR	T 2 AMP (PCB 301)	FIG 7
F6	CONVEYOR BELT MOTOR	T 6.3 AMP (PCB 301)	FIG 7
F7	CAM MOTOR	T 6.3 AMP (PCB 301)	FIG 7
F12	SOLENOID VALVE SV6, CASSETTE SUCKERS 24 x 30	T 4 AMP (PCB 301)	FIG 7
F13	SOLENOID VALVE SV2, MAGAZINE INJECTOR	T 4 AMP (PCB 301)	FIG 7
F14	ENTRY GUIDES MOTOR	T 4 AMP (PCB 301)	FIG 7
F15	MAGAZINE CARRIAGE MOTOR	T 4 AMP (PCB 301)	FIG 7
F16	RELAY 12 VOLT DC PROTECTION	T 1 AMP (PCB 301)	FIG 7
F17	SOLENOID VALVE SV4, MAGAZINE SUCKERS	T 4 AMP (PCB 301)	FIG 7
F18	SOLENOID VALVE SV3, CASSETTE SUCKERS 18 x 24	T 4 AMP (PCB 301)	FIG 7
F19	SOLENOID VALVE SV5, PRESSURE VENT	T 4 AMP (PCB 301)	FIG 7
F20	SOLENOID VALVE SV1, CASSETTE INJECTOR	T 4 AMP (PCB 301)	FIG 7
F21	CASSETTE GUIDE MOTOR	T 4 AMP (PCB 301)	FIG 7
F22	SECONDARY WINDING, 15 VOLTS AC (RELAYS)	T 4 AMP (PCB 206)	FIG 9
F23	SECONDARY WINDING, 12 VOLTS AC (MOTORS)	T 16 AMP (PCB 206)	FIG 9
F24	SECONDARY WINDING, 10 VOLTS AC (PCELL & MICRO)	T 10 AMP (PCB 206)	FIG 9
F25	8 x 10 ENDSTOP MOTOR	T 4 AMP (PCB 301)	FIG 7

RELAYS

K1	COMPRESSOR MOTOR	PCB 301	FIG 7
K2	CASSETTE VACUUM PUMP MOTOR	PCB 301	FIG 7
K3	MAGAZINE VACUUM PUMP MOTOR	PCB 301	FIG 7
K5	TILT MOTOR	PCB 301	FIG 7
K6-F	CONVEYOR BELT MOTOR, FORWARD	PCB 301	FIG 7
K6-R	CONVEYOR BELT MOTOR, REVERSE	PCB 301	FIG 7
K7-F	CAM MOTOR, FORWARD	PCB 301	FIG 7
K7-R	CAM MOTOR, REVERSE	PCB 301	FIG 7
K12	SOLENOID VALVE SV6, CASSETTE SUCKERS 24 x 30	PCB 301	FIG 7
K13	SOLENOID VALVE SV2, MAGAZINE INJECTOR	PCB 301	FIG 7
K14-F	ENTRY GUIDE MOTOR, FORWARD	PCB 301	FIG 7
K14-R	ENTRY GUIDE MOTOR, REVERSE	PCB 301	FIG 7
K15-F	MAGAZINE CARRIAGE MOTOR, FORWARD	PCB 301	FIG 7
K15-R	MAGAZINE CARRIAGE MOTOR, REVERSE	PCB 301	FIG 7
K17	SOLENOID VALVE SV4, MAGAZINE SUCKERS	PCB 301	FIG 7
K18	SOLENOID VALVE SV3, CASSETTE SUCKERS 18 x 24	PCB 301	FIG 7
K19	SOLENOID VALVE SV5, PRESSURE VENT	PCB 301	FIG 7
K20	SOLENOID VALVE SV1, CASSETTE INJECTOR	PCB 301	FIG 7
K21	CASSETTE GUIDES MOTOR	PCB 301	FIG 7
K22	PROCESSOR STAND-BY	PCB 301	FIG 7
K23	MAGAZINE CARRIAGE INHIBIT (WHEN MAGAZINE OPEN)	PCB 205	FIG 8
K25	8 x 10 ENDSTOP MOTOR	PCB 301	FIG 7

MICROSWITCHES

MS1	24 x 30 and 8 x 10 MAGAZINE PRESENCE (WHEN MAGAZINE IS FORWARD)	FIG 3
MS2	18 x 24 MAGAZINE PRESENCE (WHEN MAGAZINE IS FORWARD)	FIG 3
MS3	TILT MOTOR, HOME POSITION	FIG 4
MS4	TILT MOTOR, TILT ON POSITION	FIG 4
MS5	CASSETTE GUIDES IN 18 x 24 POSITION	FIG 4
MS6	CASSETTE GUIDES IN 24 x 30 POSITION	FIG 4
MS7	CASSETTE GUIDES IN 8 x 10 POSITION	FIG 4
MS8	MAGAZINE CARRIAGE END SWITCH (WHEN CARRIAGE REACHES EITHER EXTREME)	FIG 1
MS9	MAGAZINE CARRIAGE IN 18 x 24 MAGAZINE FORWARD POSITION	FIG 3
MS16	8 x 10 END STOP, LOWERED	FIG 2
MS17	8 x 10 END STOP, RAISED	FIG 2
MS18	RECEIVING MAGAZINE PRESENT (STAND-ALONE VERSION ONLY)	NOT SHOWN

PHOTOCELLS

	CONNECTS	
	TO	
FC1 18 x 24 and 24 x 30 CASSETTES AT ENDSTOP, and FILM IN CASSETTE FOR 18 x 24 and 24 x 30	PCB 303	FIG 6
FC2 CASSETTE ENTERED	PCB 303	FIG 5
FC3 CASSETTE OPENED SIGNAL	PCB 303	FIG 1
FC4 FILM STUCK ON UPPER SCREEN (18 x 24 & 24 x 30 ONLY)	PCB 303	FIG 6
FC5 SUPPLY MAGAZINE NEARLY EMPTY	PCB 303	FIG 4
FC6 SUPPLY MAGAZINE EMPTY, and SUPPLY MAGAZINE CODE 1	PCB 303	FIG 6
FC7 FILM IN UPPER CHUTE, (PROCESSOR INTERFACE VERSION ONLY) or RECEIVING MAGAZINE FULL (STAND-ALONE VERSION ONLY) and 8 x 10 CASSETTE NOT UNLOADED DETECTION	PCB 303	FIG 3
FC8 MULTIPLE FILM LOAD	PCB 303	FIG 6
FC9 FILM IN LOWER CHUTE (M35-M VERSION ONLY) or RECEIVING MAGAZINE 18 x 24 CODE (STAND-ALONE ONLY)	PCB 303	NOT SHOWN
FC10 8 x 10 CASSETTE AT 8 x 10 ENDSTOP	PCB 303	FIG 6
FC11 NOT USED AT PRESENT	PCB 303	
FC12 SUPPLY MAGAZINE CODE 2 and MAGAZINE EMPTY DETECTOR FOR A MINILOADER 1 MAGAZINE USED IN OPTIONAL ADAPTOR	PCB 303	FIG 6
FC13 8 x 10 CASSETTE NOT RELOADED	PCB 303	FIG 6
FC14 RECEIVING MAGAZINE OPEN (STAND-ALONE VERSION ONLY)	PCB 303	NOT SHOWN
FC15 VIDEO CASSETTE DETECTION (AFTER MODIFICATION M02)	PCB 303	FIG 5
FC20 UPPER CARRIAGE SUPPLY MAGAZINE IS OPEN	PCB 205	FIG 4
FC21 LOWER CARRIAGE SUPPLY MAGAZINE IS OPEN	PCB 205	FIG 4

MOTORS

M1 COMPRESSOR MOTOR	FIG 3
M2 CASSETTE VACUUM PUMP MOTOR	FIG 4
M3 MAGAZINE VACUUM PUMP MOTOR	FIG 4
M4 FAN MOTOR	FIG 2
M5 TILT MOTOR	FIG 4
M6 CASSETTE CONVEYOR MOTOR	FIG 2
M7 CAM MOTOR	FIG 2
M8 MAGAZINE CARRIAGE MOTOR	FIG 2
M9 CASSETTE ENTRY GUIDE MOTOR	FIG 5
M10 CASSETTE GUIDES MOTOR	FIG 1
M11 8 X 10 ENDSTOP MOTOR	FIG 2

SOLENOID VALVES

SV1	CASSETTE INJECTOR	FIG 4
SV2	MAGAZINE INJECTOR	FIG 4
SV3	18 x 24 and 8 x 10 CASSETTE SUCKERS	FIG 1
SV4	MAGAZINE SUCKERS	FIG 1
SV5	PRESSURE VENT - AT END OF CYCLE	FIG 2
SV6	24 x 30 CASSETTE SUCKERS	FIG 1

TEST POINTS

				PINS		
				+	-	
TP101	PCB 301	12 VOLT DC, RELAYS	(10.5 to 13.5 VOLT DC.)	2	1	FIG 7
		12 VOLT DC, MOTORS	(11 to 15 VOLT DC.)	3	4	FIG 7
TP102	PCB 301	5 VOLT DC, MICROPROCESSOR	(4.8 to 5.2 VOLT DC.)	2	1	FIG 7
		12 VOLT DC, SENSORS	(10.5 to 13.5 VOLT DC.)	3	1	FIG 7
		POWER ON RESET		5	1	FIG 7

MISCELLANEOUS

CB-1	MAIN CIRCUIT BREAKER	FIG 1
	CYCLE COUNTER	FIG 6
	ENCODER ASSEMBLY	FIG 4
T1	TRANSFORMER (RELAYS AND MOTORS)	FIG 3
T2	TRANSFORMER (SENSORS AND MICROPROCESSOR)	FIG 3
TB1	MAIN TERMINAL BLOCK	FIG 2
TB2	TERMINAL BLOCK ON TRANSFORMER T1	FIG 3
TB3	TERMINAL BLOCK ON TRANSFORMER T2	FIG 3
	CUSTOMER KEYPAD	FIG 5

FIGURE 1

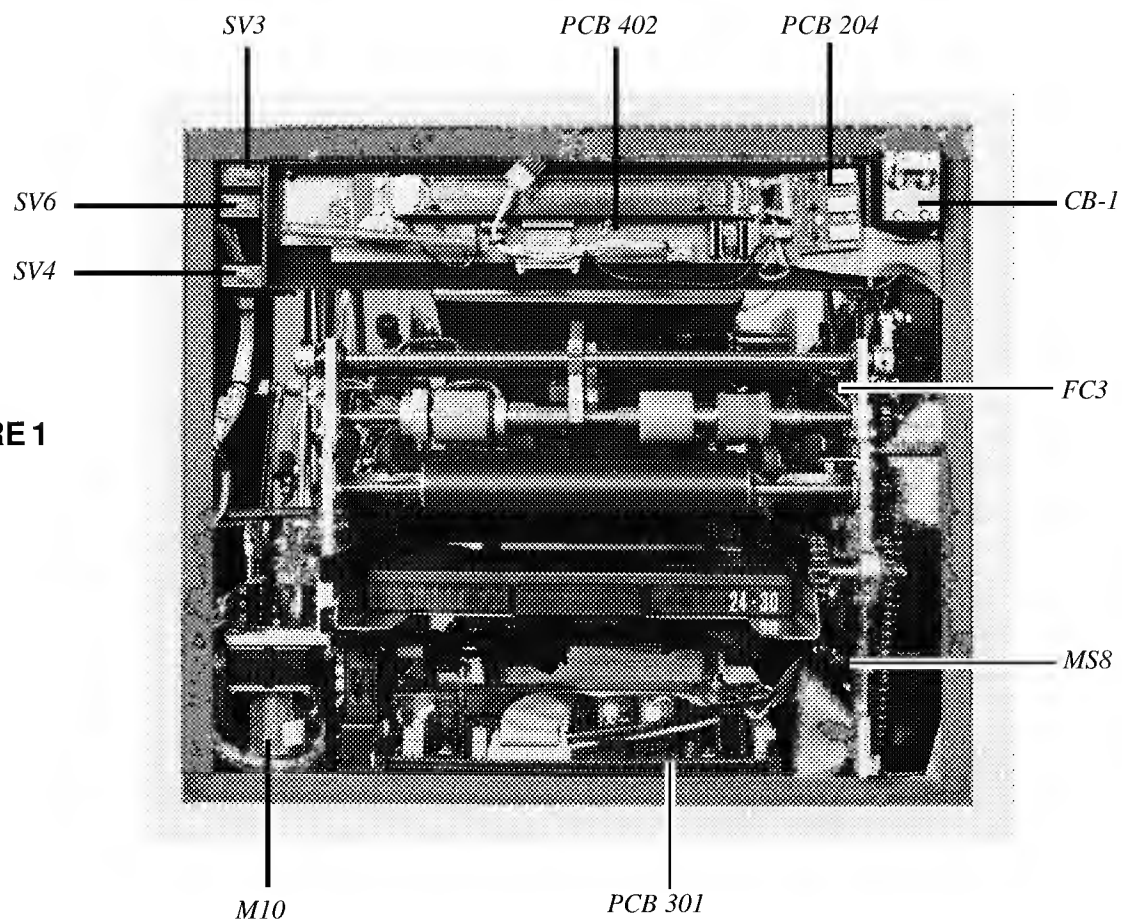


FIGURE 2

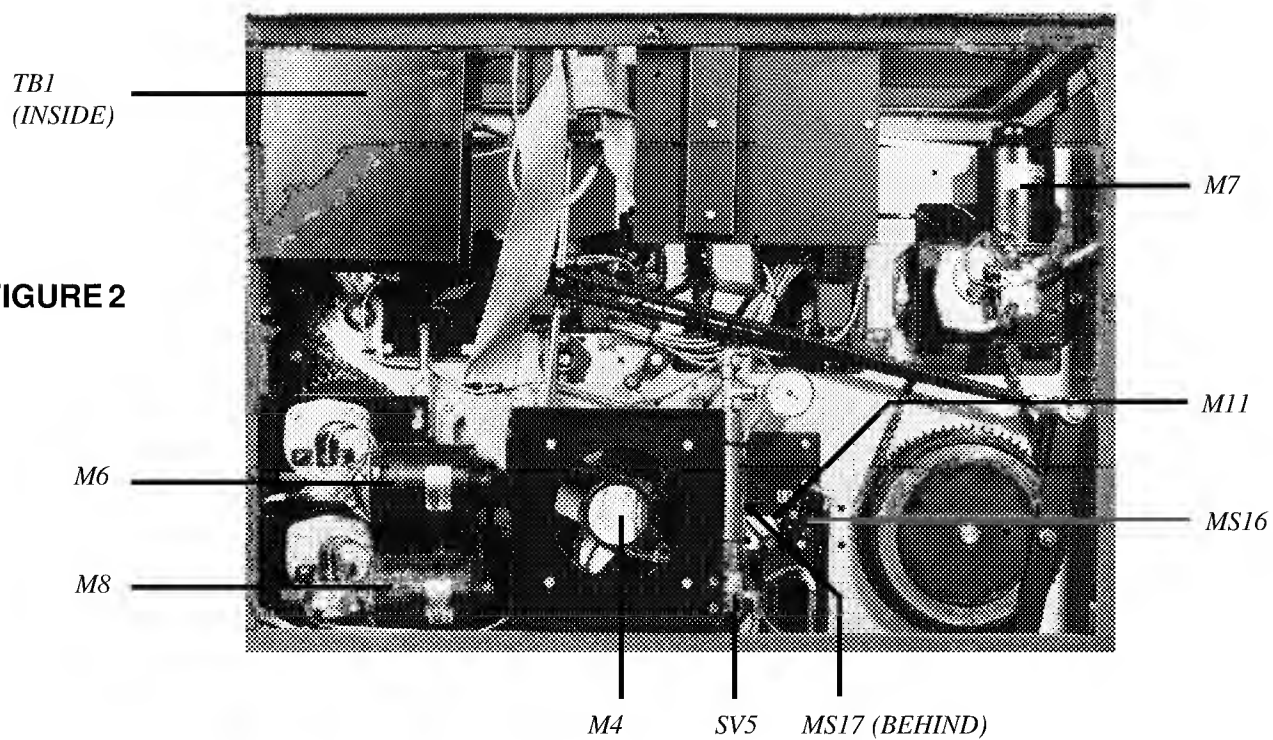


FIGURE 3

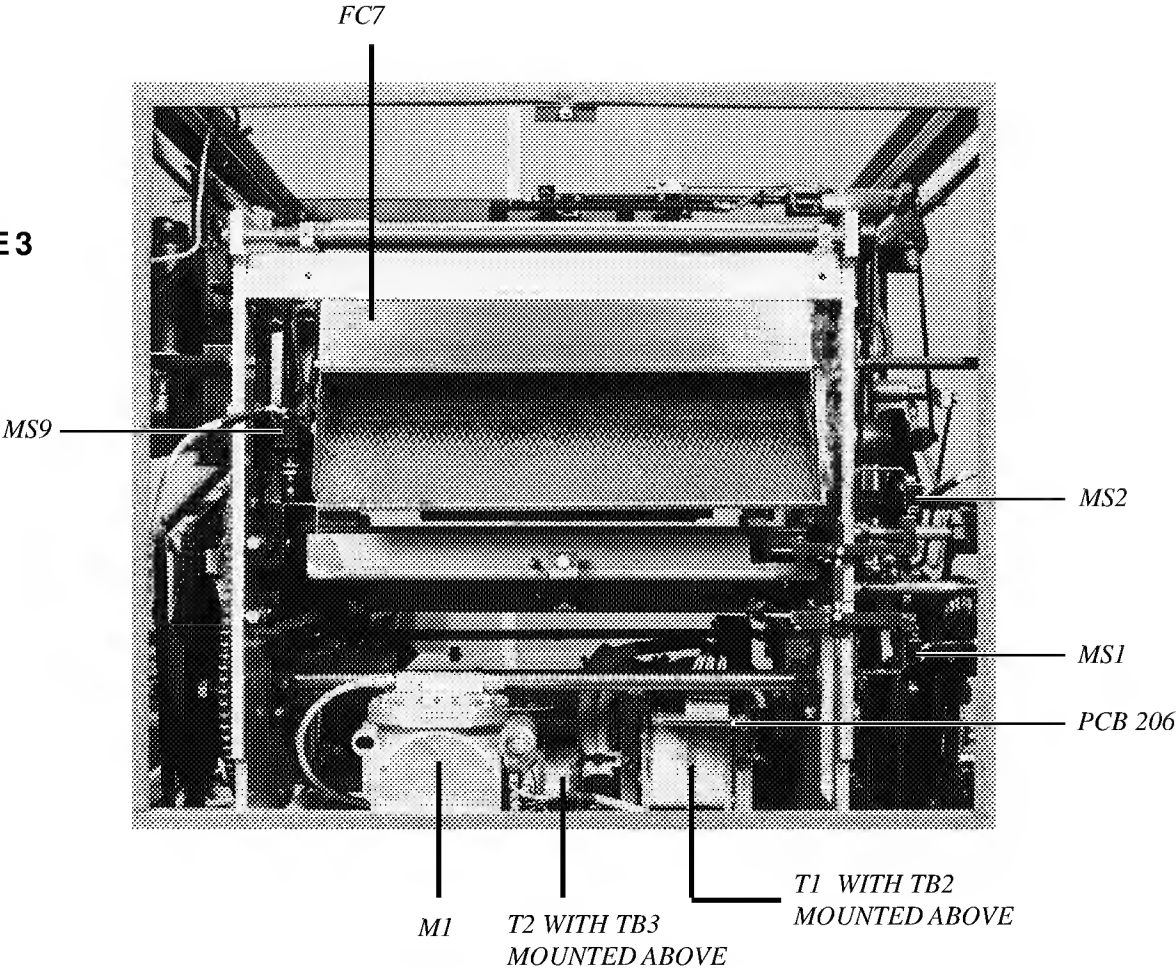


FIGURE 4

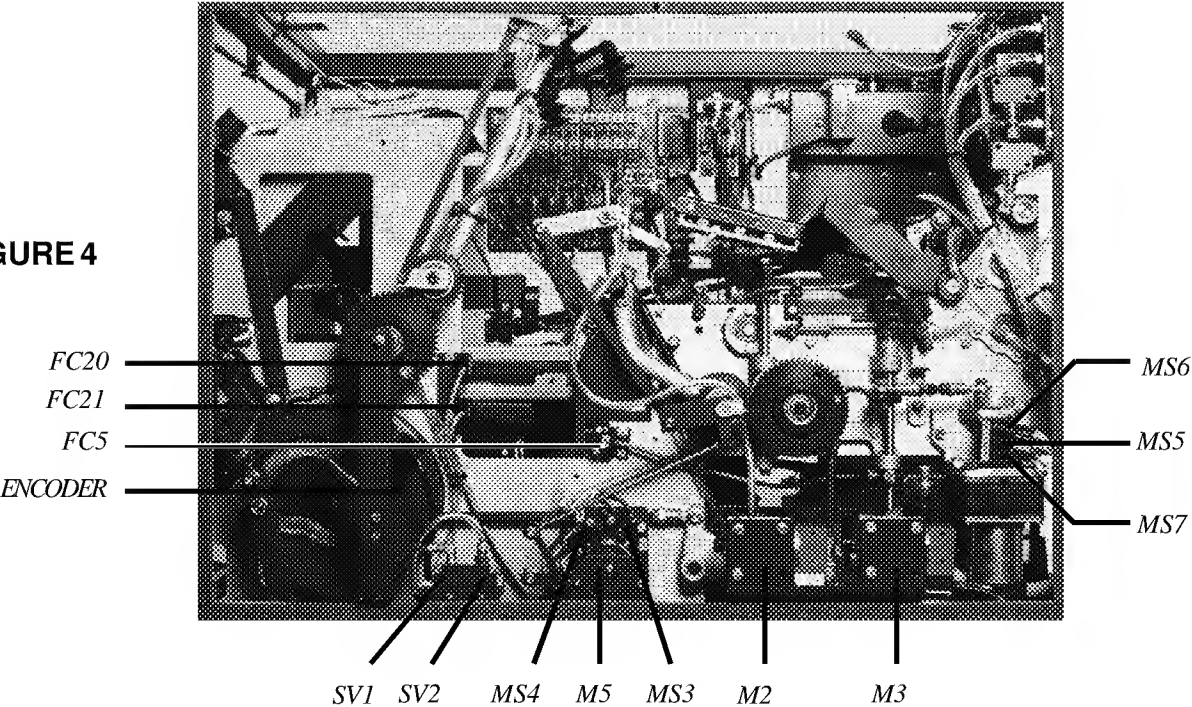


FIGURE 5

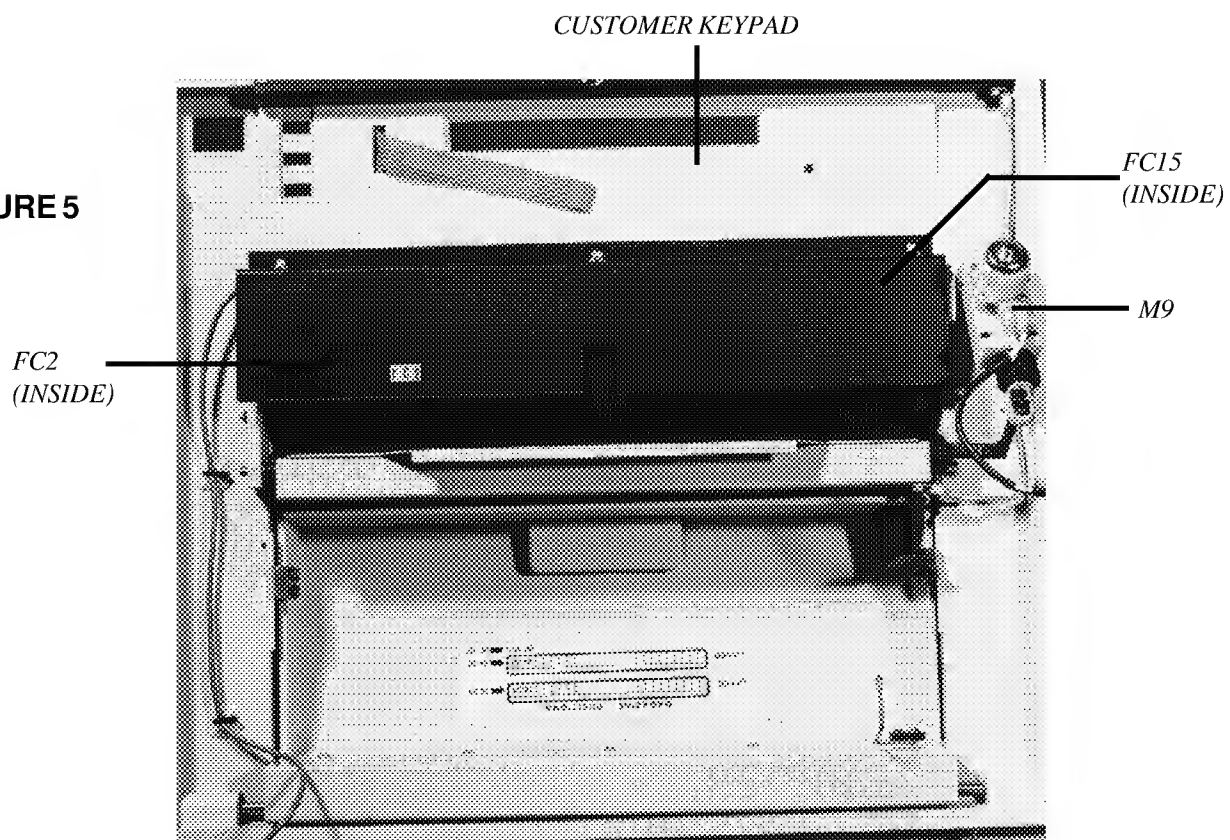
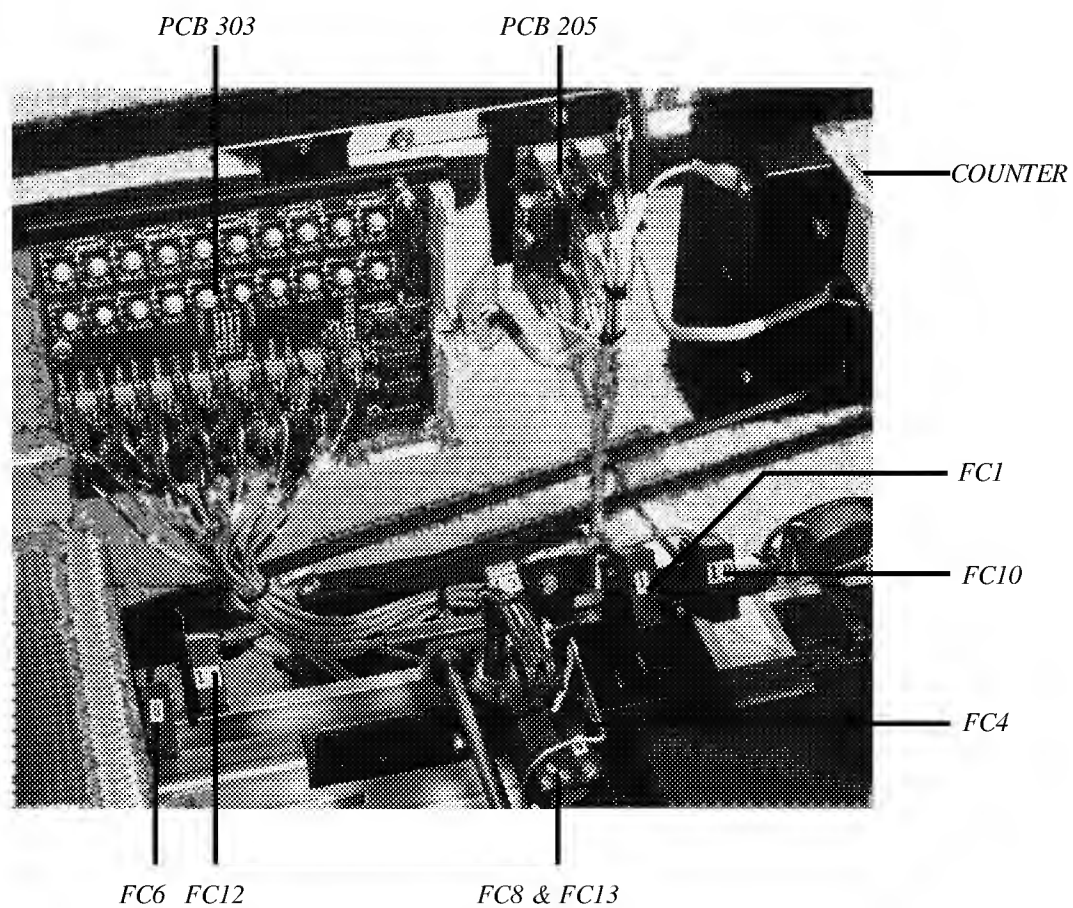
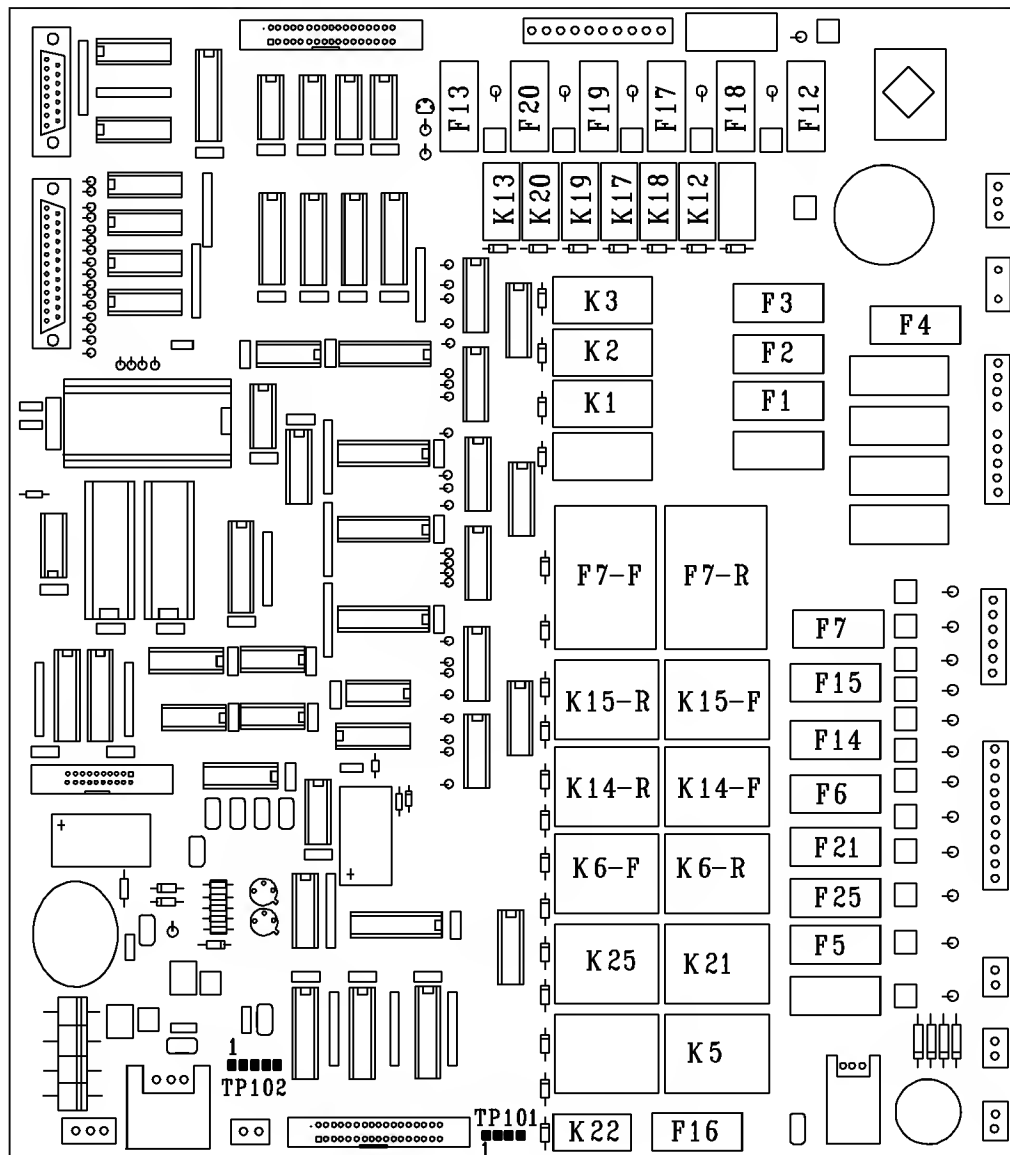


FIGURE 6



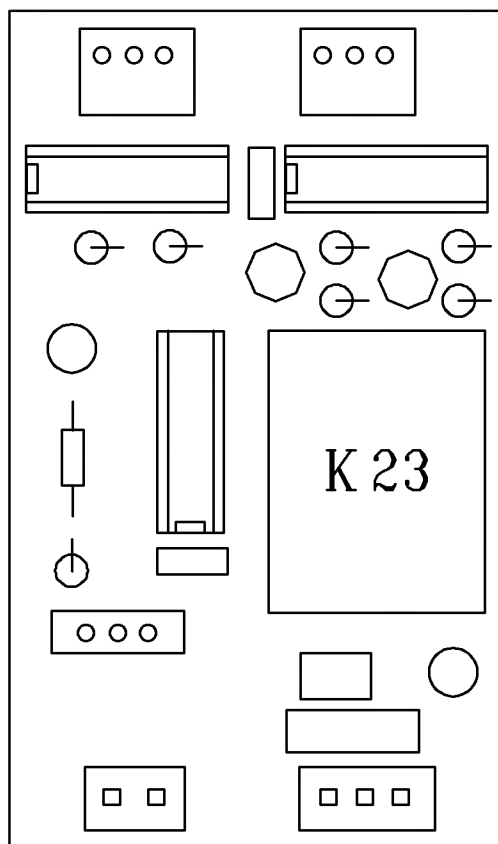


PCB 301 - FUSES, RELAYS AND TEST POINTS.

FIGURE 7

FIGURE 8

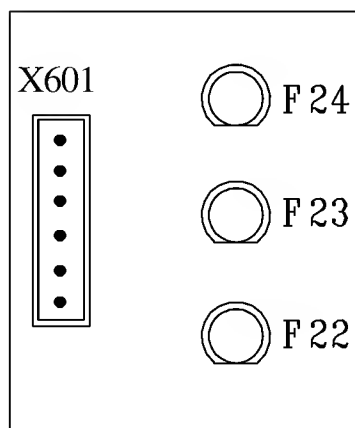
PCB 205



PCB205_R.DCH

FIGURE 9

PCB 206



PCB206_F.DCH

Publication Change Notice Table

Rev. Date	PCN No.	Pub.No.	Affected Pages	Description
August 92	1	30080001	All	Complete updating of all pages.
December 92	2	30080003	All	All pages renumbered. Page 4 -correction to Fuse F7 value. Page 5 -microswitch MS18 added. Page 7 - voltage tolerances added.



HEALTH SCIENCES DIVISION
